

Stalagmite



www2.nature.nps.gov/grd/geology/caves/

Caves are some of the most fragile and easily damaged environments on earth.

When you visit caves remember the motto of the National Speleological Society:

"Take only pictures, kill nothing but time, and leave nothing behind."

A desert Pallid bat catches its food using echo-location in the dark of night. Lighting for photo by Dr. Scott Altenbach.



Carlsbad Caverns National Park Carlsbad, NM (505) 785-2232

to www.nps.gov

Craters of the Moon National Monument Arco, ID (208) 527-3257

Great Basin National Park Baker, NV (775) 234-7331

Jewel Cave National Monument Custer, SD (605) 673-2288

Lava Beds National Monument Tulelake, CA (530) 667-2282 Mammoth Cave National Park Mammoth Cave, KY (270) 758-2328

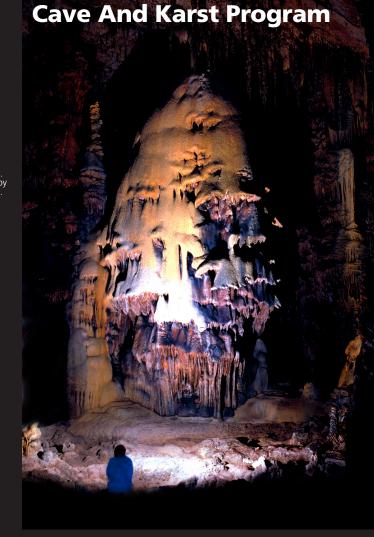
Oregon Caves National Monument Cave Junction, OR (541) 592-2100

Russell Cave National Monument Bridgeport, AL (205) 495-2672

Timpanogos Cave National Monument American Fork, UT (801) 756-5239

Wind Cave National Park Hot Springs, SD (605) 745-4600 National Park Service U.S. Department of the Interior

Geologic Resources Division



Cave and karst areas are a rich source of yet-to-bediscovered knowledge of the world around us. The National Park Service Cave and Karst Program emphasizes stewardship, responsibility, science, cooperation, coordination, and education.





Column



Flowstone Floors





A lava tube entrance at Hawaii Volcanoes National Park, Hawaii

### What is a cave?

The Federal Cave Resources Protection Act of 1988, 16 U.S.C. §§ 4301-4310 (1994) (FCRPA), defines a cave as "any naturally occurring void, cavity, recess, or system of interconnected passageways beneath the surface of the earth." Caves and karst features occur in some 120 units in all regions of the National Park System. There are at least 23 types of caves, including lava tubes, solution caves in limestone and gypsum, tectonic fractures (earth cracks), littoral (sea) caves, ice caves, and talus caves.



A troglobitic (cave adapted) salamander

#### What is karst?

Karst is a landform comprised of sinkholes, sinking streams, zones of infiltration, underground passageways or watercourses, and spring resurgences, usually occurring in a soluble rock such as limestone or gypsum.



A karst spring in Ozark National Scenic Riverways, Missouri

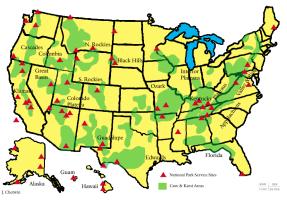
### Resources

Cave and karst resources include mineral deposits (cave formations), special species known as troglobites (animals adapted to living in cave and karst areas), paleontological materials, cultural artifacts and associations, bats and other animals, and underground water courses. These unique cave and karst areas were created and are continually changed by a combination of specific geologic and biologic processes. Contamination or other types of interference with these processes can change the basic characteristics of these environments and can lead to degradation, and even destruction, of cave and karst resources.

# Importance of cave and karst systems

Cave and karst areas:

- hold about 25% of the nation's groundwater;
- include valuable data relevant to global climate change, waste disposal, groundwater supply and contamination, petroleum recovery, and biomedical investigations;
- contain data that are pertinent to anthropologic, archaeologic, geologic, paleontologic, and mineralogic discoveries and resources;
- are natural laboratories; and
- act as natural traps for flora and fauna, and new species of extinct animals have been discovered from paleoentological excavations in caves.



There are almost 4,000 known caves within the National Park System. The National Park Service has cave and karst management staff in Denver, Colorado to work with cave and karst specialists stationed in the parks.

# **The Cave and Karst Program**

The Program provides:

- protection for natural processes in cave ecosystems and karst landscapes;
- scientific studies and research in or about cave and karst resources and systems;
- cartographic surveys and inventories of cave systems;
- educational and recreational opportunities;
- development of guidelines to maximize cave protection and management
- monitoring of natural environmental conditions and visitor use impact; and
- methods for sustainable use of cave resources.